

BIBLIOGRAPHY

C. FITZHUGH TALMAN, Meteorologist in Charge of Library

RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Baur, Franz.

Wert und Verwertung von Beziehungsgleichungen zur Voraussage von Mittelwerten der Wetterelemente für grössere Zeitschnitte. p. 36-41. 26½ cm.

Bentley, Wilson A.

Jewels of winter storms caught by the camera. Snowflakes taken in forty-five seasons number 4,600, yet no two are alike. Craftsmen use their designs. p. 14, 20. illus. 42½ cm. (N. Y. Times mag., Mar. 6, 1927.)

Blanchard, W. O.

Murphysboro tornado. p. 435-446. illus. plate. 26 cm. (Repr.: Sci. mon., v. 23, Nov., 1926.)

Brooks, Charles E. P.

Climate through the ages; a study of the climatic factors and their variations. London. 1926. 439 p. illus. (maps). diagrs. 22 cm.

Brunner, W.

Erscheinungen im Luftmeer. Zürich. 1926. 102 p. figs. plates. 20½ cm.

Buechel, Frederick A.

Commerce of agriculture; a survey of agricultural resources. New York. 1926. ix, 439 p. illus. (maps). diagrs. 23½ cm. [Climates of the world, p. 21-65.]

Canada. Natural resources intelligence service.

Prince Edward Island, Canada; its resources and opportunities. [Ottawa.] 1926. 63 p. illus. 22 cm. [Climate, p. 12-14.]

Chilcott, E. C.

Relations between crop yields and precipitation in the Great Plains area. Washington. 1927. 94 p. diagrs. 29 cm. (U. S. agric. dept. Misc. circ. no. 81. Feb., 1927.)

Fedorov, E. E.

Das Klima als Wettergesamtheit. 26 p. 36 cm. (Slutzk (vorin. Pavlovsk) bei Leningrad. Magn. met. Observ.) [Manifold.]

Finley, John P.

Rainfall hazard. Fundamental factors which have to do with this weather risk and their practical application to underwriting. Article 1-3. v. p. illus. 32 cm. [Journ. of Amer. insur., Oct., 1926, Jan.-Feb., 1927.] [Reprint.]

Gil, Martin.

Fundamentos del proyecto de ley creando la dirección de meteorología e hidrometría. Sesiones de 14 y 17 de Septiembre de 1926. Buenos Aires. 1926. 44 p. 19½ cm. (Camara de diputados de la nacion.)

Kalitin, N. N.

Die Durchsichtigkeit der Erdatmosphäre nach Beobachtungen in Pawlowsk. p. 376-400. figs. 22 cm. (Sonderdr.: Gerlands Beiträge zur Geophysik. Bd. 15, Heft 4, 1926.)

Kopfmüller, U.

Der Land- und Seewind am Bodensee. 56 p. figs. 22 cm. (Sonderab. aus dem 54. Hefte der Schriften des Vereines für Geschichte des Bodensees und seiner Umgebung.)

League of nations. International committee on intellectual cooperation.

Minutes of the eighth session, held at Geneva from Monday, July 26th, to Thursday, July 29th, 1926. Geneva. 1926. v. p. 33 cm. [Includes discussion of proposal to establish an international bureau of meteorology. Other documents relating to the same project are filed with this report.] (Pub. League of nations. XII. A. Intellectual cooperation. 1926. XII. A. 8.)

Lee, Everett S., & Foust, C. M.

Measurement of surge voltages on transmission lines due to lightning. p. 135-145. illus. plate. 30½ cm. (Gen. elec. rev., v. 30, no. 3, March, 1927.)

Lillo, Miguel.

Cuarenta años de observaciones pluviométricas y termométricas en la ciudad de Tucumán (1883-1923). Buenos Aires. 1924. 31 p. diagrs. 26 cm.

Lindenberg. Aeronautisches Observatorium.

Höhenwetterdienst und Luftverkehr. Beeskow i. M. n. d. 22 p. illus. 22½ cm.

McEachron, K. B.

Time, voltage, and current characteristics of lightning arresters. 8 p. illus. 27 cm. (Repr.: Gen. elec. rev., Oct., 1926.)

Mildner, Paul.

Über Luftdruckwellen. Synoptische Darstellung der 24-tägigen und der 8-tägigen Welle für die Zeit vom 10. Dezember 1923 bis zum 19. Febr. 1924. Leipzig. 1926. p. 173-238. figs. plates (part fold.) 24 cm. (Veröffentl. des Geophys. Inst. Univ. Leipzig. 2te. Ser. Spezialarbeiten aus dem Geophys. Inst. Bd. 3. H. 3.)

Mitsuda, R.

Lightning survey in Japan. p. 124-128. illus. 30½ cm. (Gen. elec. rev., v. 30, no. 3, March, 1927.)

Nolan, J. J.

Breaking of water-drops by electric fields. Dublin. 1926. p. 28-39. figs. 27 cm. (Proc. Roy. Irish acad., v. 37, sec. A, no. 3.)

Peppler, W.

Der Föhn im Bodenseegebiet nach den aerologischen Beobachtungen der Drachenstation. 17 p. fig. 22 cm. (Sonderab. aus dem 54. Heft der Schriften des Vereines für Geschichte des Bodensees und seiner Umgebung.)

Zur Aerologie des Föhns. München. 1926. p. 198-214. 25½ cm. (Beiträge zur Phys. der freien Atmos. 12. Bd. H. 4.)

Petitjean, L.

Application à l'Afrique du Nord de la méthode norvégienne de prévision du temps. (Notes parues aux Comptes rendus des séances de l'Académie des sciences). Alger. 1927. 19 p. plates (fold.) 24 cm.

Quayle, E. T.

Sunspots and Australian rainfall. p. 131-143. figs. 25 cm. (Repr.: Proc. Roy. soc. Victoria. v. 37. (new ser.) pt. 2, 1925.)

Russia. Hydrological congress.

Proceedings of the first Russian hydrological congress held in Leningrad 7-14 May 1924. Leningrad. 1925. 622 p. plates (part fold.) 28 cm.

[Russia.] Observatoire géophysique central.

Bulletin de la Commission actinométrique permanente de l'Observatoire géophysique central. Leningrad. 1926. no. 1-2, 1925-no. 1, 1926. 26½ cm.

Speerschneider, C. I. H.

Om forholdene i Danske farvande aarene 1861-1906. Fortsettelse af meddelelse nr. 2.) København. 1927. 83 p. plate. 25½ cm. (Publikationer Danske met. inst. Meddeleser. Nr. 6.)

Szymkiewicz, Dezydry.

Études climatologiques. Warszawa. n. d. no. 11-13. p. 125-140. fig. 21½ cm. (Extr.: Acta soc. bot. Poloniæ. v. 4, nr. 2, 1927.)

Tabellas para o calculo das alturas pelas observações barométricas. p. 269-289. plates (fold.) 18½ cm. [Rio de Janeiro. Observ. nac. Annuario. v. 43, 1927.]

Tucson sunshine-climate club.

Tucson-Arizona; man-building in the sunshine climate. unp. illus. 21½ cm.

Universal humidifying co.

Practical unit humidifier for the dwelling—apartment—office—or individual room . . . [Philadelphia. c1926.] 32 p. illus. 23 cm.

Practical humidifier for the steam-heated home . . . [Philadelphia. c1927.] 32 p. illus. 23 cm.

Wendler, August.

Das Problem der technischen Wetterbeeinflussung. Hamburg. 1927. 107 p. figs. 23 cm. (Probleme der kosmischen Physik. no. 9.)

Wichtigste Ergebnisse der meteorologischen Beobachtungen in Hessen in dem zehnjährigen Zeitraum 1911–1920 und in dem zwanzigjährigen Zeitraum 1901–1920. Darmstadt. 1926. 16 p. plates. 34 cm. (Anhang Deutschen met. Jahrbuch. Hessen. 1919 und 1920.)

Wiese, W.

Vergleich der im Sommer 1925 beobachteten Eisverhältnisse im Barents- und Karischen Meer mit den vorhergesagten. p. 301–306. diagr. 25 $\frac{1}{2}$ cm. [Abstract in German. Title and text also in Russian.]

RECENT PAPERS BEARING ON METEOROLOGY

The following titles have been selected from the contents of the periodicals and serials recently received in the library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

American journal of science. New Haven. (5) v. 18. February, 1927.

Schuchert, Charles. Winters in the Upper Devonian of New York and Acadia. p. 123–132.

Annalen der Hydrographie und maritimen Meteorologie. Berlin. 55. Jahrgang. Januar 1927.

Georgi, J., & Rodewald, M. Auswertung zweier Flugzeugaufstiege zur Diagnose der Wetterlage. p. 6–8.

Markgraf, Hans. Bericht über Messungen des luftelektrischen Spannungsgefälles bei Hamburg 1925. p. 9–12.

Meyer, H. Der Zyklon in Veracruz am 28. September 1926. p. 25–26.

Müller, W. Der Habana-Zyklon vom 20. Oktober 1926. p. 26–27.

Perlewitz, P., Wittenbecher, J., & Rodewald, M. Die zweite hamburgische wissenschaftliche Freiballonfahrt. p. 1–6.

Ullrich, W. Über meteorologische Beobachtungen an Bord und deren Verwertung bei der Deutschen Seewarte. p. 12–16.

British astronomical association. Journal. London. v. 37. February, 1927.

Burns, Gavin J. The auroral arch. p. 158–160.

Deutsche Seewarte. Aus dem Archiv. Hamburg. 44. Jahrgang, nr. 1. 1926.

Gans, Margarete. Das Hudsonmeer. [Includes discussion of climate & climatic tables.]

Electrical world. New York. v. 89. April 9, 1927.

Millar, Preston S., & Gray, S. McK. Visibility in street lighting. New test object described. p. 760–761.

Engineering news-record. New York. v. 98. March 31, 1927.

Entenman, Paul M. Flood danger in the Colorado delta—channel construction the only safeguard. p. 532–534.

France. Académie des sciences. Comptes rendus. Paris. t. 184. 1927.

Faucher, D., & Rougetot, E. Contribution à l'étude du mistral. p. 614–615. (7 mars.)

Mathias, E. Contribution à l'étude de la matière fulminante: Examples de décomposition spontanée. p. 565–568. (7 mars.)

Idrac, P., & Bureau, R. Expériences sur la propagation des ondes radiotélégraphiques en altitude. p. 691–692. (14 mars.)

Mathias, E. Contribution à l'étude de la matière fulminante. Celle-ci est-elle chaude ou froide? p. 653–655. (14 mars.)

Geografski vestnik. Ljubljana. 1926.

Rubić, Ivo. Padaline u Splitu. p. 17–22. (no. 1.); p. 72–81. (no. 2/3.)

Geographical review. New York. v. 17. April, 1927.

Henry, Philip W. The Great Lakes-St. Lawrence waterway. p. 258–277. [Discusses fluctuations of water level in the Great Lakes.]

Iberica. Tortosa. Año 9. 7 enero 1922.

Navarro, M[anuel] Maria S. El professor Alfredo de Quervain. p. 165–166. [Obituary.]

Institut hydrologique de Russie. Bulletin. Leningrad. no. 17. 1926.

Wiese, W. Über die Vorhersage der Zeit des Aufganges der Newa. p. 13–24. [Russian text with German abstract, p. 23–24.]

Meteorological magazine. London. v. 61. March, 1927.

Brooks, C. E. P. An early essay in co-operative meteorology: the great storm of 1703. p. 31–35.

Fairgrieve, J. London fog, January 20th, 1927. p. 29–31. [With chart showing gradual advance of the fog in the city from 9 a. m. to 4 p. m.]

Lieutenant-Colonel Henry Mellish. p. 46–47. [Obituary.]

Météorologie. Paris. n. s. t. 3. 1927.

Delcambre. Une application imprévue de la météorologie. Conclusion d'un débat littéraire. p. 21–22. (Janvier.)

Hesselberg, Th. Ernst G. Calwagen. p. 15–17. (Janvier.) [Obituary]

Mellot, Arsène. Contribution à l'étude de la climatologie de la France. p. 22–26. (Janvier.) [French weather records of 17th, 18th & 19th centuries.]

Pérès, B. Détermination d'une région des côtes françaises de la Manche et de l'Atlantique le plus favorable à une prise de films cinématographiques en juin et juillet. p. 64–67. (Février.)

Raymond, G. Altération des styles en aluminium des instruments enregistreurs dans les régions maritimes. p. 63–64. (Février.)

Sanson, J. La météorologie et l'agriculture en 1926. p. 54–62. (Février.)

Nature. London. v. 119. March 19, 1927.

Chapman, S. The sun, the earth's atmosphere, and radio transmission. p. 428–429.

Nature. Paris. 1 avril 1927.

Cabanès. La "grande expérience" de Pascal: Descartes ou Pascal? p. 321–322.

Physikalische Zeitschrift. Leipzig. 28. Jahrgang, no. 5. 1927.

Dejmek, Joh. Zur Theorie der Wirbel. p. 196–198.

Maurer, H. Die Stromrichtung in Blitzen. p. 211–212.

Poland. Institut météorologique central. Etudes météorologiques et hydrographiques. Varsovie. 1925/1926.

Dobrowolski, A. B., & Wasik, J. The problem of the air and water movements over the ground-unevenesses. p. 54–65;

Rittich, P. A. Comment observer "les systèmes de nuages." p. 3–16. [In Polish.]

Reale accademia dei Lincei. Atti. Roma. Rendiconti. v. (6)5, fasc. 3. 1927.

Rossi, G. Osservazioni sulla scintillazione delle stelle esequite nel R. Osservatorio del Campidoglio. p. 161–164.

Science. New York. v. 65. April 1, 1927.

Bauer, Louis A. Cosmic aspects of atmospheric electricity. p. 314–316.

Sociedad astronómica de España y América. Revista. Barcelona. Año 17. Enero-febrero, 1927.

Mendirichaga, Hernández. La ceniza de los volcanes en climatología. p. 12–16.

Terrestrial magnetism and atmospheric electricity. Baltimore. v. 32. March, 1927.

Cairns, J. E. I. A statistical study of the effects of the atmospheric-electric elements on broadcast reception. p. 11–16.

Tuve, M. A., & Huff, C. On the use of a radioactive collector for potential-gradient measurements. p. 17–25.

Wait, G. R. Preliminary note on the effect of dust, smoke, and relative humidity upon the potential gradient and the positive and negative conductivities of the atmosphere. p. 31–35.

U. S. Hydrographic office. Pilot chart of the central American waters.

Hurd, Willis Edwin. The northerns of the Central American region.

SOLAR OBSERVATIONS

SOLAR AND SKY RADIATION MEASUREMENTS DURING MARCH, 1927

By HERBERT H. KIMBALL, Solar Radiation Investigations

For a description of instruments and exposures and an account of the method of obtaining and reducing the measurements, the reader is referred to the REVIEW for January, 1924, 52: 42, January, 1925, 53: 29, and July, 1925, 53: 318.

From Table 1 it is seen that solar radiation intensities averaged close to normal at Washington, D. C., and Madison, Wis., and slightly above normal at Lincoln, Nebr. At Lincoln, at 10:08 a. m. of the 21st a measured intensity of 1.54 gram calories per minute per square centimeter is only 1 per cent less than the highest midday intensity ever measured at that station in March.